

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON-MN/KJR/MCDR-81/BBS

Mine code : 30ORI08106

- (i) Name of the Inspecting : **25**) **SHRI IBRAHIM SARIF**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Debabrat Patra, Mines Manger
Official with
Designation
- (iv) Date of Inspection : 13/10/2015
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NAIBAGA IRON & MANGANESE**
- (b) Category : A Other than Fully Mech.
- (c) Type of Working : Opencast
- (d) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : NAIBAGA
- Taluka : JHUMPURA
- Post office : DUBUNA
- Pin Code :
- FAX No. : 06767272298
- E-mail : nimm.tpm@gmail.com
- Phone : 9437072218
- (e) Police Station : JODA
- (f) First opening date : 17/11/2009
2. Address for : AT-JODA
correspondance PO-JODA
DIST- KEONJHAR
3. (a) Lease Number :
- (b) Lease area :
- (c) Period of lease :
- (d) Date of Expiry :
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : SRI TARINI PRASAD MOHANTY
 MINE OWNER , JODA
 KEONJHAR ORISSA
 Phone:
 FAX :

Owner : T P MOHANTY
 JODA KEONJHAR ORISSA
 Phone: 06767273475
 FAX : 06767273475

Agent : SHRI ARPIT MOHAR
 JODA KEONJHAR ODISHA
 KEONJHAR ORISSA
 Phone: 06767273475
 FAX : 06767273475

6. Date of approval of Mining : 02/06/2015
 Plan/Scheme of Mining

PART - II : TECHNICAL DETAILS/COMMENTS

1. Details about Average employment :

Maximum number of persons employed on any day during the year

| Employment category | No.of employment | Av. yearly working days |
|---------------------|------------------|-------------------------|
| DIRECT | | |
| Managerial | 2 | 301 |
| Supervisory | 2 | |
| Workers | 1 | |
| Others | 6 | |
| CONTRACT | | |
| Others | 24 | |
| Supervisory | 2 | |

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

| Action during the year | Expenditure in Rs. Lakhs for | | | | Remarks |
|------------------------|------------------------------|----------|--------------|----------|---------|
| | previous year | | current year | | |
| | Proposed | Incurred | Proposed | Incurred | |
| General | | | | | |
| Infrastructure | | | | | |
| Sub total | | | | | |
| Sub total | | | | | |
| Total | | | | | |

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

There was no outstanding violations. During present inspection violations of rule 13(10), 33(2) and 45(5)(7) of MCDR 1988 were observed and pointed out to the party vide letter dated 16.11.2015 followed by show cause notice on 04.02.2016. Party has submitted compliance vide letter no. TPM/IBM/MCDR/1/15-16 dated 15.12.2015 and letter no. TPM/IBM/MCDR/3/15-16 dated 26.02.2016. Compliance of rule 45(5)(7) of MCDR is considered as complied, whereas compliance of violation of rule 13(1) and 33(2) of MCDR 1988 may be observed during next inspection.

4. A note on the justification in case of suspension of mining operation under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988, if recommended.

Not Recommended

5. Scientific Mining

| Items | Proposal | Actual work done | Remarks |
|-------|----------|------------------|---------|
|-------|----------|------------------|---------|

A. Exploration (Rule 13)

| | | | |
|--|--|---|--|
| a.Type of prospecting : and exploration i.e. pitting, drilling | | 2014-15 : 6 bore holes drilled. As per UNFC exploration carried out in the lease area (14 Ha) is as below G1 level- 23.886 Ha G2 Level- 2.604 Ha Unexplored area -12.149 Ha | |
| b.Total area covered : | | 26.49 H | |

B. Working (Rule 13)

| | | | |
|--|--|---|--|
| a.Number and size of : each pit (LxWxH) | | 04 no. pit EQ-1: 138m X 84 x 10m EQ-2 : 83m x 6m x 1 EQ-3 : 34m X 37m approx. EQ-4 : 69m x 65m x 7m | |
| b.Bench : Regular, 5m x 10m size(LxWxH)length can be defined as regular/irregular | | Regular, 5m x 10m | |
| c.Ore to waste ratio : pit wise if possible otherwise for mine | | Nil | |
| d.Total area covered : 10.76 Ha under excavation/pits | | 2.193 Ha. approx. | |

C. Waste disposal (Rule 13)

| | | | |
|---|--|---|--|
| a.Location of dumps : Central part of the lease area | | Waste generated earlier was utilised for maintanance of road etc. | |
| e.Yearly generation : 79733 m3 of waste quantity. | | Nil | |
| b.Method of dumping : Retreating whether advancing/retreat | | NA | |
| c.Total area covered : 1.6 Ha under waste dump. | | NA | |
| d.No.and size of each : One dump waste dump with No of steps/lift/bench | | Nil | |

D. Production

| | | | |
|---|--|---|--|
| b.Year wise : 2013-14 : 537494 production of last MT | | 2013-14 : 59920 MT 2014-15: 59950 MT | |
|---|--|---|--|

five year. 2014-15: 538736
MT

D. Reserve

a. Reserve position as :
per latest MP/MS and
at the time of
inspection.

| Ore | Iron Manganese Ore |
|------|--------------------------|
| 111 | 9395000 MT 155000 MT |
| 122 | 751000 MT 61000 MT |
| 221: | 3808000 MT 13000 MT & |
| 222 | 348000 MT |
| | 2000 MT |

RESERVE POSITION AS ON 01/04/2015

IRON ORE

| Category | Quantity in Tonnes | Grade |
|----------|--------------------|---------|
| Proved | 9395000 | +45% Fe |
| Probable | 751000 | +45% Fe |
| Possible | 4156000 | +45% Fe |
| Total | 14302000 | |

PRODUCTION FOR THE PREVIOUS YEAR 2014 - 2015

| Mineral | Production | Unit |
|----------|------------|------|
| IRON ORE | 59950 | TON |

6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : Low grade and sub grade has been stocked separately and blend with high grade ore as and when required.

Efforts for improving percentage of recovery of ore. : Sorting, sizing & screening

Mineral Rule 15

Number of benches in ore and waste. : In Ore 1 to 2 benches
Waste : Nil

Percentage of recovery of ore pitwise w.r.t. ROM and total material : 100%

Sub/grade mineral/fines (Rule 16)

Qty of yearly generation and total qty available during inspection with grade : During the year 2014-15 no sub grade production. Closing stock on 31.03.2015 is 971 tonne (-55% fines)

Number and size of each stack : Nil

Separate stacking from waste : Yes

Location of stacking. : Central part of lease area

Exploration data as on 31/03/ 2015

| No. of Boreholes | No. of Pits | No. of Trenches |
|------------------|-------------|-----------------|
| 20 | | |

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2014 - 2015

| | |
|---|---|
| Overburden/waste removed (in m ³) : | 0 |
|---|---|

Utilisation of Sub Grade Mineral and Mineral Rejects

| Generated | Utilised | Stacked | (In Ton.) |
|-----------|----------|---------|-----------|
| | | | |

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The instant lease area is part of small hillock, is gently sloping towards West.
- b. Aesthetic environment : Natural vegetation is all around the lease area. Plantation along slopes of sub grade stocks and along safety zone area has been carried out to improve aesthetic beauty.
- c. Soil and land use pattern : No top soil is generated.
Pit : 2.193 ha
Road : 2.110 Ha
Mineral storage : 1.85 Ha
Workshop : 0.01 Ha
- d. Agriculture : No agriculture land inside the lease.
- f. Vegetation : The lease area is covered with few plants and shrubs, no such thick vegetation is observed.
- h. Public building, places and monuments (protected, historical), place of worship and places of tourist : No such Public building, places and monuments (protected, historical), place of worship and places of tourist is present in the lease area.

B Water environment.

- a. Surface water : A perennial nala is flowing West central part of the lease area and finally meets Bitarani River. Surface water management is being carried out by constructing a channel of the garland drains all around the dump as per the gradient of the ML area. All the drains are then connected to final garland drain which leads the water to a settling tank of required capacity for settling of silt and also provide water storage for infiltration and recharge of ground water.
- c. Quality of water : Potable
- b. Ground water : Ground water is not intersected by mining activity

C. Air environment

- a. Noise : Controlled blasting is being carried out to mitigate noise and vibrations. Quarterly monitoring is being carried out. All parameters are within permissible limit
- b. Air : Air environment of the mines is being protected by adoption of the following practices/technologies:
 1. Regular water sprinkling to suppress dust generation during movement of dumpers.
 2. Speed limit instruction is given to all transporters to limit dust generation.
 Quarterly monitoring is being carried out. All parameters are within permissible limit.

c. Climatic condition : Climate of the region is tropical in nature.

D. Socio economic environment

a. Social and demographic profile. : mostly tribble people are there in locality.

b. Recommending health and safety. : IME & PME has been carried out of all workers & employees. Health camp checkup is being organised by the lessee, provision of supplying free medicines to the villagers (including employees) are provided.

7.1 Comments on the steps taken by the lessee towards maintaining environment and monitoring of environmental parameters to ensure the qualitative improvement in the environment and ecology.

| <u>Water Management</u> | | | | | |
|-------------------------|--------------|--------------|-----------|--------|--------|
| Season | Station type | Station name | Parameter | Value | |
| | | | | Actual | Excess |

| <u>Air data for excess parameters</u> | | | | | |
|---------------------------------------|--------------|--------------|-----------|--------|--------|
| Season | Station name | Type of area | Parameter | Value | |
| | | | | Actual | Excess |

| <u>PLANTATION DURING THE PREVIOUS YEAR</u> | <u>2014 - 2015</u> | Area in Hect. |
|--|--------------------|---------------|
|--|--------------------|---------------|

| <u>TOP SOIL MANAGEMENT</u> |
|----------------------------|
| Quantity as on 31/03/2015 |

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

Cost of Production : Rs. 1514.01 per tonne

| Reserves | : | Iron Ore | Manganese Ore |
|----------|------------|----------|---------------|
| 111 | 9395000 MT | | 155000 MT |
| 122 | 751000 MT | | 61000 MT |
| 221: | 3808000 MT | 13000 MT | |
| & 222 | 348000 MT | 2000 MT | |

Production : 59950 MT

Pit Mouth value : +58-60% (L) Rs.4549.00 , +62-65%(L)-Rs. 5197,
55-58%(F)-Rs. 971, 58-60%(F)-Rs. 2084

Stock : 544.00 T(ROM)

Land use pattern :

Pit : 2.193 ha
Plant, Road : 2.120 Ha
Mineral storage : 2.350 Ha

PART - III : PERFORMANCE OF MINE OWNER

(In case of lease expiring within 2 years - as per guidelines)

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

None

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

There exist a no mans land of mineralised areahaving 20 m width all along instant lease and mining lease of OMC ltd. In in the instant of mineral conservation the above no mans land may be included in any of the above said adjacent lease area.

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

None

Date :

(SHRI IBRAHIM SARIF)

Indian Bureau of Mines